

**DERWENT-ACC-NO: 1997-354440**  
**DERWENT-WEEK: 199733**  
**COPYRIGHT 1999 DERWENT INFORMATION LTD**

**TITLE: Method of manufacturing optical module with e.g. laser diode, photodiode used in e.g. microscope - involves aligning and connecting upper electrode, formed on lower surface of laser diode, and lower electrode formed on surface of substrate**

**PATENT-ASSIGNEE: HITACHI CABLE LTD[HITD], HITACHI LTDLE LTD[HITA]**

**PRIORITY-DATA: 1995JP-0304157 (November 22, 1995)**

**PATENT-FAMILY:**

<b>PUB-NO</b>	<b>PUB-DATE</b>	<b>LANGUAGE</b>	<b>PAGES</b>	<b>MAIN-IPC</b>
<b>JP 09145965 A</b>	<b>June 6, 1997</b>	<b>N/A</b>	<b>010</b>	<b>G02B 006/42</b>

**APPLICATION-DATA:**

<b>PUB-NO</b>	<b>APPL-DESCRIPTOR</b>	<b>APPL-NO</b>	<b>APPL-DATE</b>
<b>JP09145965A</b>	<b>N/A</b>	<b>1995JP-0304157</b>	<b>November 22, 1995</b>

**INT-CL (IPC): G02B006/42; H01S003/18**

**ABSTRACTED-PUB-NO: JP09145965A**

**BASIC-ABSTRACT: The method involves detecting the respective image signals of a first alignment marker (14) and a second alignment marker (14'). The first and second alignment markers are formed on a substrate (10).**

**An optical waveguide (12) is formed on the substrate corresponding to the laser beam radiating portion (6) of a laser diode (1) based on the detected image signals. An upper electrode (4), formed on the lower surface of the laser diode, and a lower electrode (13), formed on the surface of the substrate, are aligned and connected.**

**ADVANTAGE - Minimises optical coupling loss between optical waveguide and optical component through highly precise mounting of optical component on substrate. Enables accurate acquisition of beam-radiating surface position, and improves characteristic of optical module.**

**CHOSEN-DRAWING: Dwg.1/8**

**TITLE-TERMS:**

**METHOD MANUFACTURE OPTICAL MODULE LASER DIODE PHOTODIODE  
MICROSCOPE ALIGN  
CONNECT UPPER ELECTRODE FORMING LOWER SURFACE LASER DIODE  
LOWER ELECTRODE  
FORMING SURFACE SUBSTRATE**

**DERWENT-CLASS: P81 U11 U12 V07 V08**

**EPI-CODES: U11-F02A4; U11-F02B; U12-A01B3; U12-A02B2A; V07-G10C;  
V08-A04A;  
V08-A06;**

**SECONDARY-ACC-NO:**

**Non-CPI Secondary Accession Numbers: N1997-293775**